Syllabus for MATH 356 ABSTRACT ALGEBRA I

Fall 2020

Instructor:	Dr. Hongdi Huang	**Time:**	MWF 9:45 AM – 10:40 AM
Email:	h237huan@rice.edu	**Place:**	Online

Format: Due to the pandemic we will conduct this course by combining pre-recorded (asynchronous) lectures and fully online discussion sessions. Questions about lecture material and certain homework problems will be addressed during the regularly scheduled MWF class time.

Discussion Days, Times, and Location:
The discussion sessions will take place on MWF 9:45 AM - 10:40 AM. We will meet regularly in a Zoom Classroom.

Office Hours: This term we will be using Piazza for problems discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Signup our class here. However, one-to-one virtual meeting request is accepted if you need it.

Course website/link: Lecture videos, Note and Homeworks will be uploaded in Canvas.

Prerequisite courses: (MATH 354 OR MATH 355) AND (MATH 302 OR MATH 354 OR MATH 220 OR MATH 221)

Textbook: Algebra: *Abstract and Concrete*, Edition 2.6 by Frederick M. Goodman. It is available at no cost here (with an optional charity donation):
http://homepage.math.uiowa.edu/~goodman/algebrabook.dir/download.htm

Course Objectives: This course is a first course in abstract algebra at undergraduate level. Successful student expect to gain experience with concepts and methods of algebra and will develop their skills in the written communication of mathematical ideas. See the Teaching Schedule on the course website for more details of algebraic structures covered in the course.

Lectures: Before the regularly scheduled MWF discussion time, I will post lecture videos and notes at least 24 hours in advance. Students are expected to go through the lecture material (video+notes) ** **before** ** the discussion meetings.

Assessment, % of Course Grade:

Homework 40%; Discussion 5%; Midterm Exam 24%; and Final Exam 31%.

Homework: There will be 11 homework sets, due at noon (by 12:00pm *sharp*) on Wednesday weekly. If the due dates are revised because of some unforeseen reasons, you will be informed by emails. I will put some 'practice problems' in each HW. Students are encouraged to try all the questions. Some of them will be discussed during the MWF discussion sessions. The lowest homework score will be waived in your final grade of your homework.

Late Homework will be graded but will receive a score of zero.

Handwritten and Latex-ed solution sets are both acceptable. But handwritten must be legible for HW grader. Solutions should be submitted online and placed in the order of questions.

Collaboration Policies: For each homework, you should work individually on the problems at first. Collaboration and discussion with others are encouraged, but only after you have given the problems a good amount of independent trying. You are also welcome to talk with me about the homework at office hour (by appointment), but again only after that you've worked on it. You should do the final write-up alone without looking back any writing or notes produced during your collaboration. Please note the names of your collaborators on your problem sets.

Discussion Assessment: Student will be assessed on their participation on the regularly scheduled MWF discussion time, and each week of participation is worth 1% of the course grade. Successful participation includes asking clarifying questions about the lecture material and providing solutions or hints to the practice HW problems.

Midterm and Final Exams: There will be one Midterm and Final exam. The time and further details will be provided closer to the exam date.

Disability Accommodation: Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Students should also contact Disability Resource Center (DRC) at adarice@rice.edu or 713-348-5841 to obtain a Letter of Accommodation to present to me and to learn about further resources: https://drc.rice.edu/.

Statement on Collegiality, Respect, and Sensitivity: The Department of Mathematics supports an inclusive learning environment where diversity and individual differences are understood, respected, and recognized as a source of strength. Racism, discrimination, harassment, and bullying will not be tolerated. We expect all participants in mathematics courses (students and faculty alike) to treat each other with courtesy and respect, and to adhere to the mathematics department standards of collegiality, respect, and sensitivity (link to department statement on collegiality, respect, and sensitivity goes here) as well as the Rice Student Code of Conduct. If you think you have experienced or witnessed unprofessional or antagonistic behavior, then the matter should be brought to the attention of the instructor and/or department chair. The Ombudsperson is also available as an intermediate, informal option, and contacting them will not necessarily trigger a formal inquiry.

Academic calendar: See: https://registrar.rice.edu/calendars/fall20.